

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-145. (Canceled)

146. (Currently Amended) A method for inhibiting or reducing IgE production in a mammal in need thereof, said method comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal, wherein said extract is provided in an amount sufficient to inhibit or reduce IgE production in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease selected from the group consisting of: anaphylaxis, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, atopic dermatitis, contagious dermatitis, urticaria, insect allergy, food allergy and drug allergy.

147. (Currently Amended) A method for decreasing the serum level of IgG1 and increasing the serum level of IgG2a in a mammal in need thereof, said method comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal, wherein said extract is provided in an amount sufficient to decrease the serum level of IgG1 and increase the serum level of IgG2a in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease selected from the group consisting of: anaphylaxis, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, atopic dermatitis, contagious dermatitis, urticaria, insect allergy, food allergy and drug allergy.

148. (Currently Amended) A method for simultaneously decreasing Th2 serum cytokines and increasing Th1 serum cytokines in a mammal in need thereof, said method

comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal, wherein said extract is provided in an amount sufficient to simultaneously decrease serum Th2 cytokines and increase serum Th1 cytokines in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease selected from the group consisting of: anaphylaxis, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, atopic dermatitis, contagious dermatitis, urticaria, insect allergy, food allergy and drug allergy.

149. (Previously Presented) The method of any of claims 146-148, wherein said allergic disease is atopic dermatitis.

150. (Previously Presented) The method of any of claims 146-148, wherein the extract is prepared from a part of the kiwifruit selected from the group consisting of: the fruit, the stem, the root, and any combination thereof.

151. (Previously Presented) The method of any of claims 146-148, wherein the extract is selected from the group consisting of a crude extract and a non-polar solvent soluble extract.

152. (Previously Presented) The method of claim 151, wherein the crude extract is soluble in a polar solvent selected from the group consisting of: distilled water, lower alcohols, and mixtures thereof.

153. (Previously Presented) The method of claim 151, wherein the crude extract is soluble in distilled water or 70% ethanol.

154. (Previously Presented) The method of claim 151, wherein the non-polar solvent is ethyl acetate.

155. (Previously Presented) The method of any of claims 146-148, wherein the extract is provided in a composition in an amount of between about 0.01% and about 30% by weight based on the total weight of the composition.

156. (Previously Presented) The method of any of claims 146-148, wherein the extract is provided in a composition in an amount of between 0.01% and about 50% by weight based on the total weight of the composition.

157. (Previously Presented) The method of any of claims 146-148, wherein the extract is provided in a composition in an amount of between about 0.01% and about 80% by weight based on the total weight of the composition.

158. (Previously Presented) The method of claim 148, wherein the Th2 cytokines are selected from the group consisting of: interleukin-4 (IL-4), IL-5 and IL-13.

159. (Previously Presented) The method of any of claims 146-148, wherein the extract is prepared by a process comprising the steps of:

- a) diluting crushed and dried kiwifruit in water or a lower alcohol;
- b) heating the diluted kiwifruit;
- c) extracting the kiwifruit extract after step b).

160. (Previously Presented) The method of claim 159, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of water in a ratio from about 1:5 to about 1:25.

161. (Previously Presented) The method of claim 159, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of lower alcohol in a ratio from about 1:5 to about 1:25.

162. (Previously Presented) The method of claim 161, wherein the lower alcohol is selected from the group consisting of: methanol, ethanol and butanol.

163. (Previously Presented) The method of claim 159, wherein the step of heating is conducted at between about 20°C and about 100°C for between about 1 and about 24 hours.

164. (Previously Presented) The method of claim 159, wherein the process further comprises a step of filtering the extract.

165. (Previously Presented) The method of claim 164, further comprising concentrating and drying the filtered extract.

166. (Currently Amended) The method of claim 165, further comprising extracting the dried filtered extract in a non-polar solvent.

167. (Previously Presented) The method of claim 166, further comprising fractionation of the extract.

168. (Previously Presented) The method of any of claims 146-148, wherein the step of administering comprises administering the extract with a conventional carrier, adjuvant, or diluent to the mammal.

169. (Previously Presented) The method of any of claims 146-148, wherein the step of administering comprises providing the extract to the mammal as a tablet, powder, capsule, liquid, suspension, granule or syrup.

170. (Previously Presented) The method, of any of claims 146-148, wherein the step of administering comprises providing the extract to the mammal in a health food.

171. (Previously Presented) The method of any of claims 146-148, wherein the step of administering comprises providing the extract to the mammal in a food additive.

172. (Previously Presented) The method of claim 171, wherein the food additive additionally comprises a compound selected from the group consisting of: lactose casein, dextrin, glucose, sucrose and sorbitol.

173. (Previously Presented) The method of claim 171, wherein the food additive is provided to the mammal as a spice, seasoning or food material.

174. (Previously Presented) The method of claim 171, wherein the food additive is added to a food selected from the group consisting of: fruits, vegetables, dehydrated foods, fruit juice, vegetable juice, drinks, confectionaries, breads, ice creams, teas, fermented milk, dairy products, spices, alcoholic beverages, noodles, processed livestock products, processed marine products, fermented food, beans, cereals, processed meats, licorices and hubs.

175. (Previously Presented) The method of any of claims 146-148, wherein the kiwifruit is selected from the group consisting of: *Actinidia arguta*, *Actinidia kolomikta*, and *Actinidia polygama*.

176. (Currently Amended) A method of inhibiting histamine release in a mammal in need thereof, said method comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal in an amount sufficient to inhibit histamine release in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease or non-allergic inflammatory disease selected from the group consisting of: anaphylaxis, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, atopic dermatitis, contagious dermatitis, urticaria, insect allergy, food allergy, drug allergy, ~~system~~ systemic lupus erythematosus, retinal inflammation, gastritis, retinopathy, hepatitis, enteritis, pancreatitis, and nephritis.

177. (Currently Amended) A method for decreasing edema in a mammal in need thereof, said method comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal in an amount sufficient to decrease edema in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease or non-allergic inflammatory disease selected from the group consisting of: anaphylaxis, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, atopic dermatitis, contagious dermatitis, urticaria, insect allergy, food allergy, drug allergy, ~~system~~ systemic lupus erythematosus, retinal inflammation, gastritis, retinopathy, hepatitis, enteritis, pancreatitis, and nephritis.

178. (Previously Presented) The method of claim 176 or 177, wherein said allergic disease is atopic dermatitis.

179. (Previously Presented) The method of claim 176 or 177, wherein the kiwifruit is selected from the group consisting of: *Actinidia arguta*, *Actinidia kolomikta*, and *Actinidia polygama*.

180. (Previously Presented) The method of claim 176 or 177, wherein the extract is prepared from a part of the kiwifruit selected from the group consisting of: the fruit, the stem, the root, and any combination thereof.

181. (Previously Presented) The method of claim 176 or 177, wherein the extract is selected from the group consisting of a crude extract and a non-polar solvent soluble extract.

182. (Previously Presented) The method of claim 181, wherein the crude extract is soluble in polar solvent selected from the group consisting of: distilled water, lower alcohols, and mixtures thereof.

183. (Previously Presented) The method of claim 181, wherein the crude extract is soluble in distilled water or 70% ethanol.

184. (Previously Presented) The method of claim 181, wherein the non-polar solvent is ethyl acetate.

185. (Previously Presented) The method of claim 176 or 177, wherein the extract is provided in a composition in an amount of between about 0.01% and about 30% by weight based on the total weight of the composition.

186. (Previously Presented) The method of claim 176 or 177, wherein the extract is provided in a composition in an amount of between 0.01% and about 50% by weight based on the total weight of the composition.

187. (Previously Presented) The method of claim 176 or 177, wherein the extract is provided in a composition in an amount of between about 0.01% and about 80% by weight based on the total weight of the composition.

188. (Previously Presented) The method of claim 176 or 177, wherein the extract is prepared by a process comprising the steps of:

- a) diluting crushed and dried kiwifruit in water or a lower alcohol;
- b) heating the diluted kiwifruit;
- c) extracting the kiwifruit extract after step b).

189. (Previously Presented) The method of claim 188, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of water in a ratio from about 1:5 to about 1:25.

190. (Previously Presented) The method of claim 188, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of lower alcohol in a ratio from about 1:5 to about 1:25.

191. (Previously Presented) The method of claim 190, wherein the lower alcohol is selected from the group consisting of: methanol, ethanol and butanol.

192. (Previously Presented) The method of claim 188, wherein the step of heating is conducted at between about 20°C and about 100°C for between about 1 and about 24 hours.

193. (Previously Presented) The method of claim 188, wherein the process further comprises a step of filtering the extract.

194. (Previously Presented) The method of claim 193, further comprising concentrating and drying the filtered extract.

195. (Currently Amended) The method of claim 194, further comprising extracting the dried filtered extract in a non-polar solvent.

196. (Previously Presented) The method of claim 195, further comprising fractionation of the extract.

197. (Previously Presented) The method of claim 176 or 177, wherein the step of administering comprises administering the extract with a conventional carrier, adjuvant, or diluent to the mammal.

198. (Previously Presented) The method of claim 176 or 177, wherein the step of administering comprises providing the extract to the mammal as a tablet, powder, capsule, liquid, suspension, granule or syrup.

199. (Previously Presented) The method of claim 176 or 177, wherein the step of administering comprises providing the extract to the mammal in a health food.

200. (Previously Presented) The method of claim 176 or 177, wherein the step of administering comprises providing the extract to the mammal in a food additive.

201. (Previously Presented) The method of claim 200, wherein the food additive additionally comprises a compound selected from the group consisting of: lactose casein, dextrin, glucose, sucrose and sorbitol.

202. (Previously Presented) The method of claim 200, wherein the food additive is provided to the mammal as a spice, seasoning or food material.

203. (Previously Presented) The method of claim 200, wherein the food additive is added to a food selected from the group consisting of: fruits, vegetables, dehydrated foods, fruit juice, vegetable juice, drinks, confectionaries, breads, ice creams, teas, fermented milk, dairy products, spices, alcoholic beverages, noodles, processed livestock products, processed marine products, fermented food, beans, cereals, processed meats, licorices and hubs.

204. (Currently Amended) A method for inhibiting or reducing IgE production in a mammal in need thereof, said method comprising orally administering a kiwifruit extract from *Actinidia arguta*, *Actinidia polygama* or *Actinidia kolomikta* to said mammal, wherein said extract is provided in an amount sufficient to inhibit or reduce IgE production in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease.

205. (Currently Amended) A method for decreasing the serum level of IgG1 and increasing the serum level of IgG2a in a mammal in need thereof, said method

comprising orally administering a kiwifruit extract from *Actinidia arguta*, *Actinidia polygama* or *Actinidia kolomikta* to said mammal, wherein said extract is provided in an amount sufficient to decrease the serum level of IgG1 and increase the serum level of IgG2a in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease.

206. (Currently Amended) A method for simultaneously decreasing Th2 serum cytokines and increasing Th1 serum cytokines in a mammal in need thereof, said method comprising orally administering a kiwifruit extract from *Actinidia arguta*, *Actinidia polygama* or *Actinidia kolomikta* to said mammal, wherein said extract is provided in an amount sufficient to simultaneously decrease serum Th2 cytokines and increase serum Th1 cytokines in said mammal, and wherein said method treats, alleviates or reduces one or more symptoms of an allergic disease.

207. (Previously Presented) The method of any of claims 204-206, wherein said allergic disease is atopic dermatitis.

208. (Previously Presented) The method of any of claims 204-206, wherein the extract is prepared from a part of the kiwifruit selected from the group consisting of: the fruit, the stem, the root, and any combination thereof.

209. (Previously Presented) The method of any of claims 204-206, wherein the extract is selected from the group consisting of a crude extract and a non-polar solvent soluble extract.

210. (Previously Presented) The method of claim 209, wherein the crude extract is soluble in a polar solvent selected from the group consisting of: distilled water, lower alcohols, and mixtures thereof.

211. (Previously Presented) The method of claim 209, wherein the crude extract is soluble in distilled water or 70% ethanol.

212. (Previously Presented) The method of claim 209, wherein the non-polar solvent is ethyl acetate.

213. (Previously Presented) The method of any of claims 204-206, wherein the extract is provided in a composition in an amount of between about 0.01% and about 30% by weight based on the total weight of the composition.

214. (Previously Presented) The method of any of claims 204-206, wherein the extract is provided in a composition in an amount of between 0.01% and about 50% by weight based on the total weight of the composition.

215. (Previously Presented) The method of any of claims 204-206, wherein the extract is provided in a composition in an amount of between 0.01% and about 80% by weight based on the total weight of the composition.

216. (Previously Presented) The method of claim 206, wherein the Th2 cytokines are selected from the group consisting of: interleukin-4.(IL-4), IL-5 and IL-13.

217. (Previously Presented) The method of any of claims 204-206, wherein the extract is prepared by a process comprising the steps of:

- a) diluting crushed and dried kiwifruit in water or a lower alcohol;
- b) heating the diluted kiwifruit;
- c) extracting the kiwifruit after step b).

218. (Previously Presented) The method of claim 217, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of water in a ratio from about 1:5 to about 1:25.

219. (Previously Presented) The method of claim 217, wherein the step of diluting comprises diluting the crushed and dried kiwifruit in a volume of lower alcohol in a ratio from about 1:5 to about 1:25.

220. (Previously Presented) The method of claim 219, wherein the lower alcohol is selected from the group consisting of: methanol, ethanol and butanol.

221. (Previously Presented) The method of claim 217, wherein the step of heating is conducted at between about 20°C and about 100°C for between about 1 and about 24 hours.

222. (Previously Presented) The method of claim 217, wherein the process further comprises a step of filtering the extract.

223. (Previously Presented) The method of claim 222, further comprising concentrating and drying the filtered extract.

224. (Currently Amended) The method of claim 223, further comprising extracting the dried filtered extract in a non-polar solvent.

225. (Previously Presented) The method of claim 224, further comprising fractionation of the extract.

226. (Previously Presented) The method of any of claims 204-206, wherein the step of administering comprises administering the extract with a conventional carrier, adjuvant, or diluent to the mammal.

227. (Previously Presented) The method of any of claims 204-206, wherein the step of administering comprises providing the extract to the mammal as a tablet, powder, capsule, liquid, suspension, granule or syrup.

228. (Currently Amended) The method of any of claims 204[[5]]-206, wherein the step of administering comprises providing the extract to the mammal in a health food.

229. (Previously Presented) The method of any of claims 204-206, wherein the step of administering comprises providing the extract to the mammal in a food additive.

230. (Previously Presented) The method of claim 229, wherein the food additive additionally comprises a compound selected from the group consisting of: lactose, casein, dextrin, glucose, sucrose, and sorbitol.

231. (Previously Presented) The method of claim 229, wherein the food additive is provided to the mammal as a spice, seasoning or food material.

232. (Previously Presented) The method of claim 229, wherein the food additive is added to a food selected from the group consisting of: fruits, vegetables, dehydrated foods, fruit juice, vegetable juice, drinks, confectionaries, breads, ice creams, teas, fermented milk, dairy products, spices, alcoholic beverages, noodles, processed livestock products, processed marine products, fermented food, beans, cereals, processed meats, licorices and hubs.

233. (New) A method for treating, alleviating or reducing one or more symptoms of an allergic disease in a mammal in need thereof, comprising orally administering an extract of kiwifruit of the genus *Actinidia* to said mammal in an amount sufficient to treat, alleviate or reduce one or more symptoms of allergic disease in the mammal, wherein said allergic disease is selected from the group consisting of: food allergy, atopic dermatitis and allergic rhinitis.

234. (New) The method of claim 233, wherein said allergic disease is food allergy.

235. (New) The method of claim 233, wherein said allergic disease is atopic dermatitis.

236. (New) The method of claim 233, wherein said allergic disease is allergic rhinitis.

237. (New) The method of claim 233, wherein the extract is prepared from a part of the kiwifruit selected from the group consisting of: the fruit, the stem, the root, and any combination thereof.

238. (New) The method of claim 233, wherein the extract is selected from the group consisting of a crude extract and a non-polar solvent soluble extract.

239. (New) The method of claim 233, wherein the extract is provided in a composition in an amount of between 0.01% and about 80% by weight based on the total weight of the composition

240. (New) The method of claim 233, wherein the extract is prepared by a process comprising the steps of:

- a) diluting crushed and dried kiwifruit in water or a lower alcohol;
- b) heating the diluted kiwifruit;
- c) extracting the kiwifruit after step b).

241. (New) The method of claim 233, wherein the step of administering comprises administering the extract with a conventional carrier, adjuvant, or diluent to the mammal.

242. (New) The method of claim 233, wherein the step of administering comprises providing the extract to the mammal as a tablet, powder, capsule, liquid, suspension, granule or syrup.

243. (New) The method of claim 233, wherein the step of administering comprises providing the extract to the mammal in a health food.

244. (New) The method of claim 233, wherein the step of administering comprises providing the extract to the mammal in a food additive.